

PCT09

## RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/786,105

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

**ENTERED**

3 <110> APPLICANT: Visible Genetics Inc.  
 4 Shipman, Robert  
 6 <120> TITLE OF INVENTION: Method and Kit for the Characterization of  
 7 Antibiotic-Resistance Mutations in Mycobacterium  
 8 tuberculosis  
 10 <130> FILE REFERENCE: VGEN.P-055-WO  
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/786,105  
 C--> 13 <141> CURRENT FILING DATE: 2001-09-28  
 15 <150> PRIOR APPLICATION NUMBER: 60/111,794  
 16 <151> PRIOR FILING DATE: 1998-12-11  
 18 <160> NUMBER OF SEQ ID NOS: 50  
 20 <170> SOFTWARE: PatentIn Ver. 2.1  
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 25 <213> ORGANISM: Mycobacterium tuberculosis  
 27 <220> FEATURE:  
 28 <223> OTHER INFORMATION: rpoB-F amplification primer  
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 49 <213> ORGANISM: Mycobacterium tuberculosis  
 51 <220> FEATURE:  
 52 <223> OTHER INFORMATION: rpoB-5s sequencing primer  
 54 <400> SEQUENCE: 3  
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 58 <210> SEQ ID NO: 4  
 59 <211> LENGTH: 20  
 60 <212> TYPE: DNA  
 61 <213> ORGANISM: Mycobacterium tuberculosis  
 63 <220> FEATURE:  
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 66 <400> SEQUENCE: 4  
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 70 <210> SEQ ID NO: 5  
 71 <211> LENGTH: 480  
 72 <212> TYPE: DNA

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73 <213> ORGANISM: Mycobacterium tuberculosis
75 <220> FEATURE:
76 <223> OTHER INFORMATION: rpoB (rifampin resistance)
78 <400> SEQUENCE: 5
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80 aaaaccagat cggggtcggc atgtcgcgga tggagcgggt ggtccgggag cggatgacca 120
81 cccaggacgt ggaggcgatc acaccgcaga cgttgatcaa catccggccg gtggtcggcg 180
82 cgatcaagga gttcttcggc accagccagc tgagccaatt catggaccag aacaaccgcg 240
83 tgtcgggggtt gaccacaag cgccgactgt cggcgctggg gcccggcggg ctgtcacgtg 300
84 agcgtgcccgg gctggaggtc cgcgacgtgc acccgctcgca ctacggccgg atgtgcccga 360
85 tcgaaacccc tgagggggccc aacatcggtc tgatcggtc gctgtcgggtg tacgcgcggg 420
86 tcaaccggtt cgggttcacg gaaacgccgt accgcaaggt ggtcgacggc gtgggttagcg 480
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Mycobacterium tuberculosis
94 <220> FEATURE:
95 <223> OTHER INFORMATION: katG-F amplification primer
97 <400> SEQUENCE: 6
98 atggggctga tctacgtgaa 20
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Mycobacterium tuberculosis
106 <220> FEATURE:
107 <223> OTHER INFORMATION: katG-R amplification primer
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110 ggtgttccag ccagcgacgc 20
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114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Mycobacterium tuberculosis
118 <220> FEATURE:
119 <223> OTHER INFORMATION: katG-5s sequencing primer
121 <400> SEQUENCE: 8
122 atggggctga tctacgtgaa 20
125 <210> SEQ ID NO: 9
126 <211> LENGTH: 20
127 <212> TYPE: DNA
128 <213> ORGANISM: Mycobacterium tuberculosis
130 <220> FEATURE:
131 <223> OTHER INFORMATION: katG-3s sequencing primer
133 <400> SEQUENCE: 9
134 ggtgttccag ccagcgacgc 20
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138 <211> LENGTH: 660
139 <212> TYPE: DNA
140 <213> ORGANISM: Mycobacterium tuberculosis
142 <220> FEATURE:

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143 <223> OTHER INFORMATION: katG (isoniazid resistance)
145 <400> SEQUENCE: 10
146 gctcgggcgat gagcggttaca gcggttaagcg ggatctggag aaccgcgtgg ccgcgggtgca 60
147 gatgggggctg atctacgtga acccgagggg gccgaacggc aaccgggacc ccatggccgc 120
148 ggcgggtcgac attcgcgaga cgtttcgggc catggccatg aacgacgtcg aaacagcggc 180
149 gctgatcgtc ggcggtcaca ctttcggtaa gacccatggc gccggcccgg ccgatctggt 240
150 cggccccgaa cccgaggctg ctccgctgga gcagatgggc ttgggctgga agagctcgta 300
151 tggcaccgga accggttaagg acgcgatcac cagcggcatc gaggtcgtat ggacgaacac 360
152 cccgacgaaa tgggacaaca gtttcctcga gatcctgtac ggctacgagt gggagctgac 420
153 gaagagccct gctggcgctt ggcaatacac cgccaaggac ggcgcgggtg ccggcaccat 480
154 cccggacccg ttcggcgggc cagggcgctc cccgacgatg ctggccactg acctctcgct 540
155 gcggggtgat ccgatctatg agcggatcac gcgtcgctgg ctggaacacc ccgaggaatt 600
156 ggccgacgag ttcgccaagg cctggtacaa gctgatccac cgagacatgg gtcccgttgc 660
159 <210> SEQ ID NO: 11
160 <211> LENGTH: 20
161 <212> TYPE: DNA
162 <213> ORGANISM: Mycobacterium tuberculosis
164 <220> FEATURE:
165 <223> OTHER INFORMATION: PR-F amplification primer
167 <400> SEQUENCE: 11
168 accactgctt tgccgccacc 20
171 <210> SEQ ID NO: 12
172 <211> LENGTH: 20
173 <212> TYPE: DNA
174 <213> ORGANISM: Mycobacterium tuberculosis
176 <220> FEATURE:
177 <223> OTHER INFORMATION: PR-R amplification primer
179 <400> SEQUENCE: 12
180 ccgatgagag cggtgagctg 20
183 <210> SEQ ID NO: 13
184 <211> LENGTH: 20
185 <212> TYPE: DNA
186 <213> ORGANISM: Mycobacterium tuberculosis
188 <220> FEATURE:
189 <223> OTHER INFORMATION: PR-5s sequencing primer
191 <400> SEQUENCE: 13
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196 <211> LENGTH: 20
197 <212> TYPE: DNA
198 <213> ORGANISM: Mycobacterium tuberculosis
200 <220> FEATURE:
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203 <400> SEQUENCE: 14
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207 <210> SEQ ID NO: 15
208 <211> LENGTH: 420
209 <212> TYPE: DNA
210 <213> ORGANISM: Mycobacterium tuberculosis

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212 <220> FEATURE:  
 213 <223> OTHER INFORMATION: oxyR-ahpC intergenic region (PR)  
 215 <400> SEQUENCE: 15  
 216 atgccctggg ggtgcaccga gaccggcttc cgaccaccgc tcgccgcaac gtcgactggc 60  
 217 tcatatcgag aatgcttgcg gcaactgctga accactgctt tgccgccacc gcggcgaacg 120  
 218 cgcgaagccc ggccacggcc ggctagcacc tcttggcggc gatgccgata aatatggtgt 180  
 219 gatatatcac ctttgctga cagcgacttc acggcacgat ggaatgtcgc aaccaaattgc 240  
 220 attgtccgct ttgatgatga ggagagtcat gccactgcta accattggcg atcaattccc 300  
 221 cgcctaccag ctaccgctc tcacggcg ggagagtgcc aaggtcgacg ccaagcagcc 360  
 222 cggcgactac ttcaccacta tcaccagtga cgaacaccca ggcaagtggc ggggtggtgt 420  
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 226 <211> LENGTH: 20  
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 233 <400> SEQUENCE: 16  
 234 cctcgctgcc cagaaaggga 20  
 237 <210> SEQ ID NO: 17  
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 239 <212> TYPE: DNA  
 240 <213> ORGANISM: Mycobacterium tuberculosis  
 242 <220> FEATURE:  
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 246 atcccccggt ttcctccggt 20  
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 250 <211> LENGTH: 20  
 251 <212> TYPE: DNA  
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 254 <220> FEATURE:  
 255 <223> OTHER INFORMATION: fabG-5s sequencing primer  
 257 <400> SEQUENCE: 18  
 258 cctcgctgcc cagaaaggga 20  
 261 <210> SEQ ID NO: 19  
 262 <211> LENGTH: 20  
 263 <212> TYPE: DNA  
 264 <213> ORGANISM: Mycobacterium tuberculosis  
 266 <220> FEATURE:  
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 270 atcccccggt ttcctccggt 20  
 273 <210> SEQ ID NO: 20  
 274 <211> LENGTH: 360  
 275 <212> TYPE: DNA  
 276 <213> ORGANISM: Mycobacterium tuberculosis  
 278 <220> FEATURE:  
 279 <223> OTHER INFORMATION: fabG (isoniazid resistance)  
 281 <400> SEQUENCE: 281

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Input Set : A:\Vgenp055.app

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282 agcgcgacat acctgctgcg caattcgtag ggcgtcaata caccgcgacg cagggcctcg 60
283 ctgcccagaa agggatccgt catggtcgaa gtgtgctgag tcacaccgac aaacgtcacg 120
284 agcgtaaccc cagtgcgaaa gttcccgcg gaaatcgag ccacgttacg ctggtggaca 180
285 taccgatttc ggcccggccg cggcgagacg ataggttgtc ggggtgactg ccacagccac 240
286 tgaagggggc aaacccccat tcgtatcccg ttcagtctcg gttaccggag gaaaccgggg 300
287 gatcgggctg gcgatcgac agcggctggc tgccgacggc cacaagggtg ccgtcaccca 360
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291 <211> LENGTH: 20
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293 <213> ORGANISM: Mycobacterium tuberculosis
295 <220> FEATURE:
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298 <400> SEQUENCE: 21
299 cggtagatgc caaccatcca 20
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304 <212> TYPE: DNA
305 <213> ORGANISM: Mycobacterium tuberculosis
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316 <212> TYPE: DNA
317 <213> ORGANISM: Mycobacterium tuberculosis
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322 <400> SEQUENCE: 23
323 cggtagatgc caaccatcca 20
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327 <211> LENGTH: 20
328 <212> TYPE: DNA
329 <213> ORGANISM: Mycobacterium tuberculosis
331 <220> FEATURE:
332 <223> OTHER INFORMATION: s12-3s sequencing primer
334 <400> SEQUENCE: 24
335 gcatcagccc ttctccttct 20
338 <210> SEQ ID NO: 25
339 <211> LENGTH: 420
340 <212> TYPE: DNA
341 <213> ORGANISM: Mycobacterium tuberculosis
343 <220> FEATURE:
344 <223> OTHER INFORMATION: rpsL/s12 (streptomycin resistance)
346 <400> SEQUENCE: 25
347 cggtagatgc caaccatcca gcagctggc cgcaagggtc gtcgggacaa gatcagtaag 60
348 gtcaagaccg cggctctgaa gggcagccc cagcgtcgtg gtgtatgcac ccgctgtac 120
349 accaccactc cgaagaagcc gaactcggcg cttcggaagg ttgccgcgt gaagttgacg 180
350 agtcaggctg aggtcacggc gtacattccc ggcgagggcc acaacctgca ggagcactcg 240

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/786,105

DATE: 12/21/2001

TIME: 13:12:25

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Output Set: N:\CRF3\12212001\I786105.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date